UNITED STATES DEPARTMENT OF AGRICULTURE

# SUCROSE CONVERSION TABLE

Agricultural Marketing Service

TECHNICAL INSPECTION PROCEDURES

Fruit and Vegetable Division

Processed Products Branch

FOR USE OF USDA PROCESSED FOODS INSPECTORS

FILE CODE 135-A-50

# U.S.D.A. SUCROSE CONVERSION TABLE

FILE CODE 135-A-50 JANUARY 1981

#### **SOURCES**

Refractive Indices of Sucrose Solutions at 20 Degrees C. (International Scale, 1936)
as presented in the 10th Edition of the Methods of Analysis of the Association of Agricultural (now "Analytical") Chemist (A.O.A.C.) 1965

and

U.S. National Bureau of Standards Circular C457

### Compiled by:

Processed Products Branch Fruit and Vegetable Division Agricultural Marketing Service United States Department of Agriculture

1970

REFRACTIVE INDEX AT 20 DEGREES C.	PERCENT SUCROSE OR DEGREE BRIX	APPARENT SPECIFIC GRAVITY @ 20/20 DEGREES C.	WEIGHT/GAL. IN AIR AT 20 DEGREES C.	POUNDS SOLIDS PER GAL.
1.3330	0.0	1.00000	8.322	.000
1.3331	0.0	.00039	.325	.008
1.3333	0.2	.00078	.328	.017
1.3334	0.3	.00117	.331	.025
1.3336	0.4	.00156	.335	.033
1.3337	0.5	1.00194	8.338	.042
1.3339	0.6	.00233	.341	.050
1.3340	0.7	.00272	.344	.059
1.3341	0.8	.00312	.348	.067
1.3343	0.9	.00351	.351	.075
1.3344	1.0	1.00390	8.354	.084
1.3346	1.1	.00429	.357	.092
1.3347	1.2	.00468	.361	.100
1.3349	1.3	.00507	.364	.109
1.3350	1.4	.00546	.367	.117
1.3352	1.5	1.00585	8.370	.126
1.3353	1.6	.00624	.374	.134
1.3354	1.7	.00663	.377	.142
1.3356	1.8	.00702	.380	.151
1.3357	1.9	.00741	.383	.159
1.3359	2.0	1.00780	8.387	.168
1.3360	2.1	.00819	.390	.176
1.3362	2.2	.00859	.393	.185
1.3363	2.3	.00898	.396	.193
1.3365	2.4	.00937	.400	.202
1.3366	2.5	1.00977	8.403	0.210
1.3368	2.6	.01016	.406	.219
1.3369	2.7	.01055	.409	.227
1.3370	2.8	.01094	.413	.236
1.3372	2.9	.01134	.416	.244
1.3373	3.0	1.01173	8.419	0.252
1.3375	3.1	.01213	.423	.261

REFRACTIVE INDEX AT 20 DEGREES C.	PERCENT SUCROSE OR DEGREE BRIX	APPARENT SPECIFIC GRAVITY @ 20/20 DEGREES C.	WEIGHT/GAL. IN AIR AT 20 DEGREES C.	POUNDS SOLIDS PER GAL.
1.3376	3.2	.01252	.426	.270
1.3377	3.3	.01292	.429	.278
1.3379	3.4	.01331	.432	.287
1.3380	3.5	1.01371	8.436	0.295
1.3382	3.6	.01410	.439	.304
1.3383	3.7	.01450	.442	.312
1.3385	3.8	.01490	.446	.321
1.3386	3.9	.01529	.449	.329
1.3388	4.0	1.01569	8.452	0.338
.3389	.1	.01609	.456	.347
.3391	.2	.01649	.459	.355
.3392	.3	.01688	.462	.364
.3394	.4	.01728	.465	.372
1.3395	4.5	1.01768	8.469	0.381
.3397	.6	.01808	.472	.390
.3398	.7	.01848	.475	.398
.3400	.8	.01888	.479	.407
.3401	.9	.01928	.482	.416
1.3402	5.0	1.01968	8.485	0.424
.3404	.1	.02008	.489	.433
.3405	.2	.02048	.492	.441
.3407	.3	.02088	.495	.450
.3408	.4	.02128	.499	.459
1.3410	5.5	1.02168	8.502	0.468
.3411	.6	.02208	.505	.476
.3413	.7	.02248	.509	.485
.3414	.8	.02289	.512	.494
.3416	.9	.02329	.515	.502
1.3417	6.0	1.02369	8.519	0.511
.3419	.1	.02409	.522	.520
.3420	.2	.02450	.526	.529
.3422	.3	.02490	.529	.537

REFRACTIVE INDEX AT 20 DEGREES C.	PERCENT SUCROSE OR DEGREE BRIX	APPARENT SPECIFIC GRAVITY @ 20/20 DEGREES C.	WEIGHT/GAL. IN AIR AT 20 DEGREES C.	POUNDS SOLIDS PER GAL.
.3423	.4	.02530	.532	.546
1.3425	6.5	1.02571	8.536	0.555
.3426	.6	.02611	.539	.564
.3428	.7	.02652	.542	.572
.3429	.8	.02692	.546	.581
.3431	.9	.02733	.549	.590
1.3432	7.0	1.02773	8.552	0.599
.3434	.1	.02814	.556	.607
.3435	.2	.02854	.559	.616
.3437	.3	.02895	.563	.625
.3438	.4	.02936	.566	.634
1.3440	7.5	1.02976	8.569	0.643
.3441	.6	.03017	.573	.652
.3443	.7	.03058	.576	.660
.3444	.8	.03098	.580	.669
.3446	.9	.03139	.583	.678
1.3447	8.0	1.03180	8.586	0.687
.3449	.1	.03221	.590	.696
.3450	.2	.03262	.593	.705
.3452	.3	.03303	.597	.714
.3454	.4	.03344	.600	.722
1.3455	8.5	1.03385	8.603	0.731
.3457	.6	.03426	.607	.740
.3459	.7	.03467	.610	.749
.3460	.8	.03508	.614	.758
.3461	.9	.03549	.617	.767
1.3463	9.0	1.03590	8.620	0.776
.3464	.1	.03631	.624	.785
.3466	.2	.03672	.627	.794
.3467	.3	.03713	.631	.803
.3469	.4	.03755	.634	.812
1.3470	9.5	1.03796	8.638	0.821

REFRACTIVE INDEX AT 20 DEGREES C.	PERCENT SUCROSE OR DEGREE BRIX	APPARENT SPECIFIC GRAVITY @ 20/20 DEGREES C.	WEIGHT/GAL. IN AIR AT 20 DEGREES C.	POUNDS SOLIDS PER GAL.
.3472	.6	.03837	.641	.830
.3473	.7	.03879	.644	.838
.3475	.8	.03920	.648	.848
.3476	.9	.03961	.651	.956
1.3478	10.0	1.04003	8.655	0.866
.3480	.1	.04044	.658	.874
.3481	.2	.04086	.662	.884
.3483	.3	.04127	.665	.892
.3484	.4	.04169	.669	.902
1.3486	10.5	1.04210	8.672	0.911
.3487	.6	.04252	.675	.920
.3489	.7	.04293	.679	.929
.3490	.8	.04335	.682	.938
.3492	.9	.04377	.686	.947
1.3493	11.0	1.04418	8.689	0.956
.3495	.1	.04460	.693	.965
.3497	.2	.04502	.696	.974
.3498	.3	.04544	.700	.983
.3500	.4	.04585	.703	.992
1.3501	11.5	1.04627	8.707	1.001
.3503	.6	.04669	.710	.010
.3504	.7	.04711	.714	.020
.3506	.8	.04753	.717	.029
.3507	.9	.04795	.721	.038
1.3509	12.0	1.4837	8.724	1.047
.3511	.1	.4879	.728	.056
.3512	.2	.04921	.731	.065
.3514	.3	.04963	.735	.074
.3515	.4	.05005	.736	.084
1.3517	12.5	1.05047	8.7422	1.093
.3518	.6	.05090	.745	.102
.3520	.7	.05132	.749	.111

REFRACTIVE INDEX AT 20 DEGREES C.	PERCENT SUCROSE OR DEGREE BRIX	APPARENT SPECIFIC GRAVITY @ 20/20 DEGREES C.	WEIGHT/GAL. IN AIR AT 20 DEGREES C.	POUNDS SOLIDS PER GAL.
.3522	.8	.05174	.752	.120
.3523	.9	.05216	.756	.130
1.3525	13.0	1.05259	8.759	1.139
.3626	.1	.05301	.763	.148
.3528	.2	.05343	.766	.157
.3529	.3	.05386	.770	.166
.3531	.4	.05428	.773	.176
1.3533	13.5	1.05470	8.777	1.185
.3534	.6	.05513	.781	.194
.3536	.7	.05556	.784	.203
.3537	.8	.05598	.788	.213
.3539	.9	.05641	.791	.222
1.3541	14.0	1.05683	8.795	1.231
.3542	.1	.05726	.798	.241
.3544	.2	.05769	.802	.250
.3545	.3	.05811	.805	.259
.3447	.4	.05854	.809	.268
1.3548	14.5	1.05897	8.812	1.278
.3550	.6	.05940	.816	.287
.3552	.7	.05982	.820	.297
.3553	.8	.06025	.823	.306
.3555	.9	.06068	.827	.315
1.3556	15.0	1.06111	8.830	1.325
.3558	.1	.06154	.834	.334
.3560	.2	.06197	.837	.343
.3561	.3	.06240	.841	.353
.3563	.4	.06283	.845	.362
1.3564	15.5	1.06326	8.848	1.371
.3566	.6	.06369	.852	.381
.3567	.7	.06412	.855	.390
.3569	.8	.06455	.859	.400
.3571	.9	.06499	.863	.409

REFRACTIVE INDEX AT 20 DEGREES C.	PERCENT SUCROSE OR DEGREE BRIX	APPARENT SPECIFIC GRAVITY @ 20/20 DEGREES C.	WEIGHT/GAL. IN AIR AT 20 DEGREES C.	POUNDS SOLIDS PER GAL.
1.3573	16.0	1.06542	8.866	1.419
.3574	.1	.06585	.870	.428
.3576	.2	.06629	.873	.437
.3577	.3	.06672	.877	.447
.3579	.4	.06715	.881	.456
1.3581	16.5	1.06759	8.884	1.466
.3582	.6	.06802	.888	.475
.3584	.7	.06845	.891	.485
.3586	.8	.06889	.895	.494
.3587	.9	.06933	.899	.504
1.3589	17.0	1.06976	8.902	1.513
.3591	.1	.07020	.906	.523
.3592	.2	.07063	.909	.532
.3594	.3	.07107	.913	.542
.3595	.4	.07151	.917	.552
1.3597	17.5	1.07194	8.920	1.561
.3598	.6	.07238	.924	.571
.3600	.7	.07282	.928	.580
.3602	.8	.07325	.931	.590
.3603	.9	.07369	.935	.599
1.3605	18.0	1.07413	8.939	1.609
.3607	.1	.07457	.942	.619
.3608	.2	.07501	.946	.628
.3610	.3	.07545	.950	.638
.3612	.4	.07589	.953	.647
1.3613	18.5	1.07633	8.957	1.657
.3615	.6	.07677	.961	.667
.3617	.7	.07721	.964	.676
.3618	.8	.07765	.968	.686
.3620	.9	.07809	.972	.696
1.3621	19.0	1.07853	8.975	1.705
.3623	.1	.07898	.979	.715

REFRACTIVE INDEX AT 20 DEGREES C.	PERCENT SUCROSE OR DEGREE BRIX	APPARENT SPECIFIC GRAVITY @ 20/20 DEGREES C.	WEIGHT/GAL. IN AIR AT 20 DEGREES C.	POUNDS SOLIDS PER GAL.
.3625	.2	.07942	.983	.725
.3626	.3	.07986	.986	.734
.3628	.4	.08030	.990	.744
1.3630	19.5	1.08075	8.994	1.754
.3631	.6	.08119	.997	.763
.3633	.7	.08164	9.001	.773
.3635	.8	.08208	.005	.783
.3636	.9	.08252	.008	.792
1.3638	20.0	1.08297	9.012	1.802
.3640	.1	.08342	.016	.812
.3641	.2	.08386	.020	.822
.3643	.3	.08431	.023	.832
.3645	.4	.9475	.027	.842
1.3646	20.5	1.08520	9.031	1.851
.3648	.6	.08565	.034	.861
.3650	.7	.08609	.038	.871
.3651	.8	.08654	.042	.881
.3653	.9	.08699	.046	.891
1.3655	21.0	1.08744	1.049	1.900
.3656	.1	.08789	.053	.910
.3658	.2	.08834	.057	.920
.3660	.3	.08879	.061	.930
.3661	.4	.08923	.064	.940
1.3663	21.5	1.08968	9.068	1.950
.3665	.6	.09013	.072	.960
.3667	.7	.09058	.076	.969
.3668	.8	.09103	.079	.979
.3670	.9	.09149	.083	.989
1.3672	22.0	1.09194	9.087	1.999
.3673	.1	.09239	.091	2.009
.3675	.2	.09284	.094	.019
.3677	.3	.09329	.098	.029

REFRACTIVE INDEX AT 20 DEGREES C.	PERCENT SUCROSE OR DEGREE BRIX	APPARENT SPECIFIC GRAVITY @ 20/20 DEGREES C.	WEIGHT/GAL. IN AIR AT 20 DEGREES C.	POUNDS SOLIDS PER GAL.
.3678	.4	.09375	.102	.039
1.3680	22.5	1.09420	9.106	2.049
.3682	.6	.09465	.109	.059
.3683	.7	.09511	.113	.069
.3685	.8	.09556	.117	.079
.3687	.9	.09602	.121	.089
1.3688	23.0	1.09647	9.125	2.099
.3690	.1	.09693	.128	.109
.3692	.2	.09738	.132	.119
.3694	.3	.09784	.136	.129
.3695	.4	.09829	.140	.139
1.3697	23.5	1.09875	9.143	2.149
.3699	.6	.09921	.147	.159
.3700	.7	.09966	.151	.169
.3702	.8	.010012	.155	.179
.3704	.9	.10058	.159	.189
1.3706	24.0	1.10104	9.163	2.199
.3707	.1	.10149	.166	.209
.3709	.2	.20295	.170	.219
.3711	.3	.10241	.174	.229
.3712	.4	.10287	.178	.239
1.3714	24.5	1.10333	9.182	2.250
.3716	.6	.10370	.185	.260
.3718	.7	.10425	.189	.270
.3719	.8	.10471	.193	.280
.3721	.9	.10517	.197	.290
1.3723	25.0	1.10564	9.201	2.300
.3724	.1	.10610	.205	.310
.3726	.2	.01656	.208	.320
.3728	.3	.10702	.212	.331
.3729	.4	.10748	.216	.341
1.3731	25.5	1.10795	9.220	2.351

REFRACTIVE INDEX AT 20 DEGREES C.	PERCENT SUCROSE OR DEGREE BRIX	APPARENT SPECIFIC GRAVITY @ 20/20 DEGREES C.	WEIGHT/GAL. IN AIR AT 20 DEGREES C.	POUNDS SOLIDS PER GAL.
.3733	.6	.10841	.224	.361
.3735	.7	.10887	.228	.372
.3736	.8	.10934	.232	.382
.3738	.9	.10980	.235	.392
1.3740	26.0	1.11027	9.239	2.402
.3741	.1	.11073	.243	.412
.3743	.2	.11120	.247	.423
.3745	.3	.11166	.251	.433
.3747	.4	.11213	.255	.443
1.3748	26.5	1.11260	9.259	2.454
.3750	.6	.11306	.263	.464
.3752	.7	.11353	.266	.474
.3753	.8	.11400	.270	.484
.3755	.9	.11447	.274	.495
1.3757	27.0	1.11493	9.278	2.505
.3759	.1	.11540	.282	.515
.3761	.2	.11587	.286	.526
.3762	.3	.11634	.290	.536
.3764	.4	.11681	.294	.547
1.3766	27.5	1.11728	9.298	2.557
.3768	.6	.11775	.302	.567
.3769	.7	.11822	.305	.578
.3771	.8	.11869	.309	.588
.3773	.9	.11916	.313	.598
1.3775	28.0	1.11963	9.317	2.609
.3777	.1	.12010	.321	.619
.3778	.2	.12058	.325	.630
.3780	.3	.12105	.329	.640
.3782	.4	.12152	.333	.651
1.3784	28.5	1.12199	9.337	2.661
.3785	.6	.12247	.341	.672
.3787	.7	.12294	.345	.682

REFRACTIVE INDEX AT 20 DEGREES C.	PERCENT SUCROSE OR DEGREE BRIX	APPARENT SPECIFIC GRAVITY @ 20/20 DEGREES C.	WEIGHT/GAL. IN AIR AT 20 DEGREES C.	POUNDS SOLIDS PER GAL.
.3789	.8	.12342	.349	.693
.3791	.9	.12389	.353	.702
1.3792	29.0	1.12436	9.357	2.714
.3794	.1	.12484	.361	.724
.3796	.2	.12532	.365	.735
.3798	.3	.12579	.369	.745
.3800	.4	.12627	.372	.755
1.3801	29.5	1.12674	9.376	2.766
.3803	.6	.12722	.380	.776
.3805	.7	.12770	.384	.787
.3807	.8	.12817	.388	.798
.3809	.9	.12865	.392	.808
1.3810	30.0	1.12913	9.396	2.819
.3812	.1	.12961	.400	.829
.3814	.2	.13009	.404	.840
.3816	.3	.13057	.408	.851
.3818	.4	.13105	.412	.861
1.3820	30.5	1.13153	9.416	2.872
.3821	.6	.13201	.420	.883
.3823	.7	.13249	.424	.893
.3825	.8	.13297	.428	.904
.3827	.9	.13345	.432	.914
1.3829	31.0	1.13394	9.436	2.925
.3830	.1	.13442	.440	.936
.3832	.2	.13490	.444	.947
.3834	.3	.13538	.448	.957
.3836	.4	.13587	.452	.968
1.3838	31.5	1.13635	9.456	2.797
.3839	.6	.13683	.460	.990
.3841	.7	.13732	.464	3.000
.3843	.8	.13780	.468	.011
.3845	.9	.13829	.472	.022

REFRACTIVE INDEX AT 20 DEGREES C.	PERCENT SUCROSE OR DEGREE BRIX	APPARENT SPECIFIC GRAVITY @ 20/20 DEGREES C.	WEIGHT/GAL. IN AIR AT 20 DEGREES C.	POUNDS SOLIDS PER GAL.
1.3847	32.0	1.13877	9.477	3.033
.3848	.1	.13926	.481	.043
.3850	.2	.13974	.485	.054
.3852	.3	.14023	.489	.065
.3854	.4	.14072	.493	.076
1.3856	32.5	1.14120	9.497	3.087
.3858	.6	.14169	.501	.097
.3860	.7	.14218	.505	.108
.3861	.8	.14267	.509	.119
.3863	.9	.14316	.513	.130
1.3865	33.0	1.14364	9.517	3.141
.3867	.1	.14413	.521	.151
.3869	.2	.14462	.525	.162
.3871	.3	.14511	.529	.173
.3872	.4	.14560	.533	.184
1.3874	33.5	1.14609	9.537	3.195
.3876	.6	.14658	.541	.206
.3878	.7	.14708	.546	.217
.3879	.8	.14757	.550	.228
.3881	.9	.14806	.554	.239
1.3883	34.0	1.14855	9.558	3.250
.3885	.1	.14904	.562	.261
.3887	.2	.14954	.566	.272
.3889	.3	.15003	.570	.283
.3891	.4	.15052	.574	.293
1.3893	34.5	1.15102	9.578	3.303
.3894	.6	.15151	.583	.316
.3896	.7	.15201	.587	.327
.3898	.8	.15250	.591	.338
.3900	.9	.15300	.595	.349
1.13902	35.0	1.15350	9.599	3.360
.3904	.1	.15399	.603	.371

REFRACTIVE INDEX AT	PERCENT SUCROSE OR	APPARENT SPECIFIC GRAVITY	WEIGHT/GAL. IN AIR AT	POUNDS SOLIDS
20 DEGREES C.	DEGREE BRIX	@ 20/20 DEGREES C.	20 DEGREES C.	PER GAL.
.3906	.2	.15449	.607	.382
.3908	.3	.15498	.611	.393
.3909	.4	.15548	.616	.404
1.13911	35.5	1.15598	9.620	3.415
.3913	.6	.15648	.624	.426
.3915	.7	.15698	.628	.437
.3916	.8	.15747	.632	.448
.3918	.9	.15797	.636	.459
1.13920	36.0	1.15847	9.640	3.470
.3922	.1	.15897	.645	.482
.3924	.2	.15947	.649	.493
.3926	.3	.15997	.653	.504
.3928	.4	.16047	.657	.515
1.3930	36.5	1.16098	9.661	3.526
.3931	.6	.16148	.665	.537
.3933	.7	.16198	.670	.549
.3935	.8	.16248	.674	.560
.3937	.9	.16298	.678	.571
1.3939	37.0	1.16349	9.682	3.582
.3941	.1	.16399	.686	.594
.3943	.2	.16449	.691	.605
.3945	.3	.16500	.695	.616
.3947	.4	.16550	.699	.627
1.3949	37.5	1.16601	9.703	3.639
.3950	.6	.16652	.707	.650
.3952	.7	.16702	.712	.661
.3954	.8	.16752	.716	.673
.3956	.9	.16803	.720	.684
1.3958	38.0	1.16853	9.724	3.695
.3960	.1	.16904	.728	.706
.3962	.2	.16955	.733	.718
.3964	.3	.17006	.737	.729

REFRACTIVE INDEX AT 20 DEGREES C.	PERCENT SUCROSE OR DEGREE BRIX	APPARENT SPECIFIC GRAVITY @ 20/20 DEGREES C.	WEIGHT/GAL. IN AIR AT 20 DEGREES C.	POUNDS SOLIDS PER GAL.
.3966	.4	.17056	.741	.741
1.3968	38.5	1.17107	9.745	3.752
.3970	.6	.17158	.749	.763
.3972	.7	.17209	.754	.775
.37974	.8	.17260	.758	.786
.3976	.9	.17311	.762	.797
1.3978	39.0	1.17362	9.766	3.809
.3980	.1	.17413	.771	.820
.3982	.2	.17464	.775	.832
.3984	.3	.17515	.779	.843
.3986	.4	.17566	.783	.855
1.3988	39.5	1.17618	9.788	3.866
.3989	.6	.17669	.792	.878
.3991	.7	.17720	.796	.889
.3993	.8	.17772	.801	.901
.3995	.9	.17823	.805	.912
1.3997	40.0	1.17874	9.809	3.924
.3999	.1	.17926	.813	.935
.4001	.2	.17977	.818	.947
.4003	.3	.18029	.822	.958
.4005	.4	.18080	.826	.970
1.4007	40.5	1.18132	9.831	3.982
.4008	.6	.18183	.835	.993
.4010	.7	.18235	.839	4.004
.4012	.8	.18287	.843	.016
.4014	.9	.18339	.848	.028
1.4016	41.0	1.18390	9.852	4.039
.4018	.1	.18442	.856	.051
.4020	.2	.18494	.861	.063
.4022	.3	.18546	.865	.074
.4024	.4	.18598	.869	.086
1.4026	41.5	1.18650	9.874	4.098

REFRACTIVE INDEX AT 20 DEGREES C.	PERCENT SUCROSE OR DEGREE BRIX	APPARENT SPECIFIC GRAVITY @ 20/20 DEGREES C.	WEIGHT/GAL. IN AIR AT 20 DEGREES C.	POUNDS SOLIDS PER GAL.
.4028	.6	.18702	.878	.109
.4030	.7	.18754	.882	.121
.4032	.8	.18806	.887	.133
.4034	.9	.18858	.891	.144
1.4036	42.0	1.18910	9.895	4.156
.4038	.1	.18962	.900	.167
.4040	.2	.19014	.904	.179
.4042	.3	.19062	.908	.191
.4044	.4	.19119	.913	.203
1.4046	42.5	1.19171	9.917	4.215
.4048	.6	.19224	.921	.226
.4050	.7	.19276	.926	.238
.4052	.8	.19329	.930	.250
.4054	.9	.19381	.935	.262
1.4056	43.0	1.19434	9.939	4.274
.4058	.1	.19486	.943	.285
.4060	.2	.19539	.948	.298
.4062	.3	.19591	.952	.309
.4064	.4	.19644	.956	.321
1.4066	43.5	1.19697	9.961	4.333
.4068	.6	.19749	.965	.345
.4070	.7	.19802	.970	.357
.4072	.8	.19855	.974	.369
.4074	.9	.19908	.978	.380
1.4076	44.0	1.19961	9.983	4.393
.4078	.1	.20013	.987	.404
.4080	.2	.20066	.992	.416
.4082	.3	.20119	.996	.428
.4084	.4	.20172	10.000	.440
1.4086	44.5	1.20226	10.005	4.452
.4088	.6	.20279	.009	.464
.4090	.7	.20332	.014	.476

REFRACTIVE INDEX AT 20 DEGREES C.	PERCENT SUCROSE OR DEGREE BRIX	APPARENT SPECIFIC GRAVITY @ 20/20 DEGREES C.	WEIGHT/GAL. IN AIR AT 20 DEGREES C.	POUNDS SOLIDS PER GAL.
.4092	.8	.20385	.018	.488
.4094	.9	.20438	.022	.500
1.4096	45.0	1.20491	10.027	4.512
.4098	.1	.20545	.031	.524
.4100	.2	.20598	.036	.536
.4102	.3	.20651	.040	.548
.4104	.4	.20705	.045	.560
1.4107	45.5	1.20758	10.049	4.572
.4109	.6	.20812	.054	.585
.4111	.7	.20865	.058	.597
.4113	.8	.20919	.063	.609
.4115	.9	.20972	.067	.621
1.4117	46.0	1.21026	10.071	4.633
.4119	.1	.21080	.076	.645
.4121	.2	.21133	.080	.657
.4123	.3	.31187	.085	.669
.4125	.4	.21241	.089	.681
1.4127	46.5	1.21295	10.094	4.694
.4129	.6	.21349	.098	.706
.4131	.7	.21402	.103	.718
.4133	.8	.21456	.107	.730
.4135	.9	.21510	.112	.743
1.4137	47.0	1.21564	10.116	4.755
.4139	.1	.21618	.121	.767
.4141	.2	.21673	.125	.779
.4143	.3	.21727	.130	.791
.4145	.4	.21781	.134	.804
1.4148	47.5	1.21835	10.139	4.816
.4150	.6	.21889	.143	.828
.4152	.7	.21943	.148	.841
.4154	.8	.21998	.152	.853
.4156	.9	.22052	.157	.865

REFRACTIVE INDEX AT 20 DEGREES C.	PERCENT SUCROSE OR DEGREE BRIX	APPARENT SPECIFIC GRAVITY @ 20/20 DEGREES C.	WEIGHT/GAL. IN AIR AT 20 DEGREES C.	POUNDS SOLIDS PER GAL.
1.4158	48.0	1.22106	10.651	4.877
.4160	.1	.22161	.166	.890
.4162	.2	.22215	.170	.902
.4164	.3	.22270	.175	.915
.4166	.4	.22324	.179	.927
1.4169	48.5	1.22379	10.184	4.939
.4171	.6	.22434	.189	.952
.4173	.7	.22488	.193	.964
.4175	.8	.22543	.198	.977
.4177	.9	.22598	.202	.989
1.4179	49.0	1.22652	10.207	5.001
.4181	.1	.22707	.211	.014
.4183	.2	.22762	.216	.026
.4185	.3	.22817	.220	.039
.4187	.4	.22872	.225	.051
1.4190	49.5	1.22927	10.230	5.064
.4192	.6	.22982	.234	.076
.4194	.7	.23037	.239	.089
.4196	.8	.23092	.243	.101
.4199	.9	.23147	.248	.114
1.4201	50.0	1.23202	10.252	5.126
.4203	.1	.23257	.257	.139
.4205	.2	.23313	.262	.152
.4207	.3	.23368	.266	.164
.4209	.4	.23423	.271	.177
1.4212	50.5	1.23478	10.275	5.189
.4214	.6	.23534	.280	.202
.4216	.7	.23589	.285	.214
.4218	.8	.23645	.289	.227
.4220	.9	.23700	.294	.240
1.4222	51.0	1.23756	10.299	5.252
.4224	.1	.23811	.303	.265

REFRACTIVE INDEX AT 20 DEGREES C.	PERCENT SUCROSE OR DEGREE BRIX	APPARENT SPECIFIC GRAVITY @ 20/20 DEGREES C.	WEIGHT/GAL. IN AIR AT 20 DEGREES C.	POUNDS SOLIDS PER GAL.
.4226	.2	.23867	.308	.278
.4228	.3	.23922	.312	.290
.4230	.4	.23978	.317	.303
1.4233	51.5	1.24034	10.322	5.316
.4235	.6	.24089	.326	.328
.4237	.7	.24145	.331	.341
.4239	.8	.24201	.336	.354
.4241	.9	.24257	.340	.366
1.4243	52.0	1.24313	10.345	5.379
.4245	.1	.24369	.350	.392
.4248	.2	.24425	.354	.405
.4250	.3	.24481	.359	.418
.4252	.4	.24537	.364	.431
1.4254	52.5	1.24593	10.368	5.443
.4256	.6	.24649	.373	.456
.4248	.7	.24705	.378	.469
.4260	.8	.24761	.382	.482
.4262	.9	.24818	.387	.495
1.4265	53.0	1.24874	10.392	5.508
.4267	.1	.24930	.396	.520
.4269	.2	.24987	.401	.533
.4271	.3	.25043	.406	.546
.4273	.4	.25099	.410	.559
1.4275	53.5	1.25156	10.415	5.572
.4278	.6	.25212	.420	.585
.4280	.7	.25269	.425	.598
.4282	.8	.25325	.429	.611
.4284	.9	.25382	.434	.624
1.4286	54.0	1.25439	10.439	5.637
.4288	.1	.25495	.443	.650
.4291	.2	.25552	.448	.663
.4293	.3	.25609	.453	.676

REFRACTIVE INDEX AT	PERCENT SUCROSE OR	APPARENT SPECIFIC GRAVITY	WEIGHT/GAL. IN AIR AT	POUNDS SOLIDS
20 DEGREES C.	DEGREE BRIX	@ 20/20 DEGREES C.	20 DEGREES C.	PER GAL.
.4295	.4	.25666	.458	.689
1.4297	54.5	1.25723	10.462	5.702
.4299	.6	.25780	.467	.715
.4301	.7	.25836	.472	.728
.4304	.8	.25893	.476	.741
.4306	.9	.25950	.481	.754
1.4308	55.0	1.26007	10.486	5.767
.4310	.1	.26064	.491	.781
.4312	.2	.26122	.495	.793
.4315	.3	.26179	.500	.807
.4317	.4	.26236	.505	.820
1.4319	55.5	1.26293	10.510	5.833
.4321	.6	.26350	.515	.846
.4323	.7	.26408	.519	.859
.4326	.8	.26465	.524	.872
.4328	.9	.26522	.529	.886
1.4330	56.0	1.26580	10.534	5.899
.4332	.1	.26637	.538	.912
.4334	.2	.26695	,543	.925
.4337	.3	.26772	.548	.939
.4339	.4	.26810	.553	.952
1.4341	56.5	1.26868	10.558	5.965
.4313	.6	.26925	.562	.978
.4345	.7	.26983	.657	.991
.4348	.8	.27041	.572	6.005
.4350	.9	.27098	.577	.018
1.4352	57.0	1.27156	10.581	6.031
.4354	.1	.27214	.586	.045
.4356	.2	.27272	.591	.058
.4359	.3	.27330	.596	.072
.4361	.4	.27388	.601	.085
1.4363	57.5	1.27446	10.606	6.098

REFRACTIVE INDEX AT 20 DEGREES C.	PERCENT SUCROSE OR DEGREE BRIX	APPARENT SPECIFIC GRAVITY @ 20/20 DEGREES C.	WEIGHT/GAL. IN AIR AT 20 DEGREES C.	POUNDS SOLIDS PER GAL.
.4365	.6	.27504	.610	.111
.4368	.7	.27562	.615	.125
.4370	.8	.27620	.620	.138
.4372	.9	.27678	.625	.152
1.4374	58.0	1.27736	10.630	6.165
.4376	.1	.27794	.635	.179
.4379	.2	.27853	.640	.192
.4381	.3	.27911	.644	.205
.4383	.4	.27969	.649	.219
1.4385	58.5	1.28028	10.654	6.233
.4388	.6	.28086	.659	.246
.4390	.7	.28145	.664	.260
.4392	.8	.28203	.669	.273
.4394	.9	.28262	.674	.287
1.4397	59.0	1.28320	10.678	6.300
.4399	.1	.28379	.683	.314
.4401	.2	.28437	.688	.327
.4403	.3	.28497	.693	.341
.4406	.4	.28555	.698	.355
1.4408	59.5	1.28614	10.703	6.368
.4410	.6	.28672	.708	.382
.4412	.7	.28731	.713	.396
.4415	.8	.28789	.718	.409
.4417	.9	.28849	.722	.422
1.4419	60.0	1.28908	10.727	6.436
.4422	.1	.28966	.732	.450
.4424	.2	.29025	.737	.464
.4426	.3	.29084	.742	.477
.4428	.4	.29143	.747	.491
1.4431	60.5	1.29023	10.752	6.505
.4433	.6	.29262	.757	.519
.4435	.7	.29321	.762	.533

REFRACTIVE INDEX AT 20 DEGREES C.	PERCENT SUCROSE OR DEGREE BRIX	APPARENT SPECIFIC GRAVITY @ 20/20 DEGREES C.	WEIGHT/GAL. IN AIR AT 20 DEGREES C.	POUNDS SOLIDS PER GAL.
.4437	.8	.29380	.767	.546
.4440	.9	.29439	.772	.560
1.4442	61.0	1.29498	10.777	6.574
.4444	.1	.29559	.781	.587
.4447	.2	.29618	.786	.601
.4449	.3	.29677	.791	.615
.4451	.4	.29736	.796	.629
1.4453	61.5	1.29796	10.801	6.643
.4456	.6	.29855	.806	.656
.4458	.7	.29915	.811	.670
.4460	.8	.29975	.816	.684
.4463	.9	.30034	.821	.698
1.4465	62.0	1.30093	10.826	6.712
.4467	.1	.30153	.831	.726
.4470	.2	.30212	.836	.740
.4472	.3	.30273	.841	.754
.4474	.4	.30334	.846	.768
1.4476	62.5	1.30393	10.851	6.782
.4479	.6	.30453	.856	.796
.4481	.7	.30513	.861	.810
.4483	.8	.30573	.866	.824
.4486	.9	.30633	.871	.838
1.4488	63.0	1.30694	10.876	6.852
.4490	.1	.30754	.881	.866
.4493	.2	.30815	.886	.880
.4495	.3	.30875	.891	.894
.4497	.4	.30936	.896	.908
1.4500	63.5	1.30994	10.901	6.922
.4502	.6	.31055	.906	.936
.4504	.7	.31117	.911	.950
.4507	.8	.31177	.916	.964
.4509	.9	.31237	.921	.978

REFRACTIVE INDEX AT 20 DEGREES C.	PERCENT SUCROSE OR DEGREE BRIX	APPARENT SPECIFIC GRAVITY @ 20/20 DEGREES C.	WEIGHT/GAL. IN AIR AT 20 DEGREES C.	POUNDS SOLIDS PER GAL.
1.4511	64.0	1.31297	10.926	6.993
.4514	.1	.31359	.931	7.007
.4516	.2	.31418	.936	.021
.4518	.3	.31479	.941	.035
.4521	.4	.31540	.946	.049
1.4523	64.5	1.31600	10.951	7.063
.4525	.6	.31661	.956	.078
.4528	.7	.31723	.961	.092
.4530	.8	.31784	.967	.107
.4532	.9	.31845	.972	.121
1.4535	65.0	1.31905	10.977	7.135
.4537	.1	.31966	.982	.149
.4539	.2	.32028	.987	.164
.45422	.3	.32089	.992	.178
.4544	.4	.32150	.997	.192
1.4546	65.5	1.32210	11.002	7.206
.4549	.6	.32271	.007	.221
.4551	.7	.32332	.012	.235
.4553	.8	.32393	.017	.249
.4556	.9	.32455	.022	.263
1.4558	66.0	1.32516	11.027	7.279
.4561	.1	.32577	.033	.293
.4563	.2	.32638	.038	.307
.4565	.3	.32699	.043	.322
.4568	.4	.32759	.048	.336
1.4570	66.5	1.32820	11.053	7.350
.4572	.6	.32884	.058	.365
.4575	.7	.32945	.063	.379
.4577	.8	.33007	.068	.393
.4580	.9	.33068	.073	.408
1.4582	67.0	1.33129	11.079	7.423
.4584	.1	.33292	.084	.437

REFRACTIVE INDEX AT 20 DEGREES C.	PERCENT SUCROSE OR DEGREE BRIX	APPARENT SPECIFIC GRAVITY @ 20/20 DEGREES C.	WEIGHT/GAL. IN AIR AT 20 DEGREES C.	POUNDS SOLIDS PER GAL.
.4587	.2	.33254	.089	.452
.4589	.3	.33315	.094	.466
.4591	.4	.33377	.099	.481
1.4594	67.5	1.33438	11.104	7.495
.4596	.6	.33500	.110	.510
.4599	.7	.33562	.115	.525
.4601	.8	.33625	.120	.539
.4603	.9	.33686	.125	.554
1.4606	68.0	1.33748	11.130	7.568
.4608	.1	.33810	.135	.583
.4611	.2	.33872	.140	.597
.4613	.3	.33935	.146	.613
.4615	.4	.33997	.151	.627
1.4618	68.5	1.34059	11.156	7.642
.4620	.6	.34121	.161	.656
.4623	.7	.34183	.166	.671
.4625	.8	.34245	.172	.686
.4628	.9	.34309	.177	.701
1.4630	69.0	1.34371	11.182	7.716
.4632	.1	.34433	.187	.730
.4635	.2	.34495	.192	.745
.4637	.3	.34558	.198	.760
.4640	.4	.34621	.203	.775
1.4642	69.5	1.34684	11.208	7.790
.4644	.6	.34746	.213	.804
.4647	.7	.34809	.218	.819
.4649	.8	.34871	.224	.834
.4652	.9	.34934	.229	.849
1.4654	70.0	1.34997	11.234	7.864
.4657	.1	.35060	.239	.879
.4659	.2	.35123	.245	.894
.4661	.3	.35186	.250	.909

REFRACTIVE INDEX AT 20 DEGREES C.	PERCENT SUCROSE OR DEGREE BRIX	APPARENT SPECIFIC GRAVITY @ 20/20 DEGREES C.	WEIGHT/GAL. IN AIR AT 20 DEGREES C.	POUNDS SOLIDS PER GAL.
.4664	.4	.35248	.255	.924
1.4666	70.5	1.35311	11.260	7.938
.4669	.6	.35375	.265	.953
.4671	.7	.35438	.271	.969
.4674	.8	.35501	.276	.983
.4676	.9	.35564	.281	.998
1.4679	71.0	1.35627	11.286	8.013
.4681	.1	.35691	.292	.029
.4684	.2	.35754	.297	.043
.4686	.3	.35817	.302	.058
.4688	.4	.35881	.308	.074
1.4691	71.5	1.35944	11.313	8.089
.4693	.6	.36008	.318	.104
.4696	.7	.36072	.323	.119
.4698	.8	.36135	.329	.134
.4701	.9	.36198	.334	.149
1.4703	72.0	1.36261	11.339	8.164
.4706	.1	.36324	.345	.180
.4708	.2	.36389	.350	.195
.4711	.3	.36452	.355	.210
.4713	.4	.36516	.360	.225
1.4716	72.5	1.36579	11.366	8.240
.4718	.6	.36643	.371	.255
.4721	.7	.36707	.376	.270
.4723	.8	.36771	.382	.286
.4725	.9	.36836	.387	.301
1.4728	73.0	1.36900	11.392	8.316
.4730	.1	.36964	.398	.332
.4733	.2	.37028	.403	.347
.4735	.3	.37092	.408	.362
.4738	.4	.37156	.414	.378
1.4740	73.5	1.37220	11.419	8.393

REFRACTIVE INDEX AT 20 DEGREES C.	PERCENT SUCROSE OR DEGREE BRIX	APPARENT SPECIFIC GRAVITY @ 20/20 DEGREES C.	WEIGHT/GAL. IN AIR AT 20 DEGREES C.	POUNDS SOLIDS PER GAL.
.4743	.6	.37283	.424	.408
.4745	.7	.37347	.430	.424
.4748	.8	.37411	.435	.439
.4750	.9	.37476	.440	.454
1.4753	74.0	1.37541	11.446	8.470
.4756	.1	.37605	.451	.485
.4758	.2	.37669	.456	.500
.4760	.3	.37733	.462	.516
.4763	.4	.37798	.467	.531
1.4765	74.5	1.37864	11.473	8.547
.4768	.6	.37928	.478	.563
.4770	.7	.37993	.483	.578
.4773	.8	.38057	.489	.594
.4776	.9	.38122	.494	.609
1.4778	75.0	1.38187	11.499	8.624
.4781	.1	.38252	.505	.640
.4783	.2	.38316	.510	.656
.4786	.3	.38381	.516	.672
.4788	.4	.38445	.521	.687
1.4791	75.5	1.38510	11.526	8.703
.4793	.6	.38575	.532	.718
.4796	.7	.38640	.537	.734
.4798	.8	.38705	.543	.750
.4801	.9	.38770	.548	.765
1.4803	76.0	1.38835	11.554	8.781
.4806	.1	.38902	.559	.796
.4808	.2	.38967	.564	.812
.4811	.3	.39032	.570	.828
.4814	.4	.39097	.575	.843
1.4816	76.5	1.39162	11.581	8.859
.4819	.6	.39228	.586	.875
.4821	.7	.39293	.592	.891

REFRACTIVE INDEX AT 20 DEGREES C.	PERCENT SUCROSE OR DEGREE BRIX	APPARENT SPECIFIC GRAVITY @ 20/20 DEGREES C.	WEIGHT/GAL. IN AIR AT 20 DEGREES C.	POUNDS SOLIDS PER GAL.
.4824	.8	.39358	.597	.906
.4826	.9	.39423	.602	.922
1.4829	77.0	1.39489	11.608	8.938
.4831	.1	.39554	.613	.954
.4834	.2	.39619	.619	.970
.4836	.3	.39685	.624	.985
.4839	.4	.39750	.630	9.002
1.4841	77.5	1.39816	11.635	9.017
.4844	.6	.39882	.641	.033
.4847	.7	.39949	.646	.049
.4849	.8	.40014	.652	.065
.4852	.9	.40080	.657	.081
1.4854	78.0	1.40146	11.663	9.097
.4857	.1	.40211	.668	.113
.4860	.2	.40277	.673	.128
.4862	.3	.40344	.679	.145
.4865	.4	.40409	.684	.160
1.4867	78.5	1.40475	11.690	9.177
.4870	.6	.40541	.695	.192
.4873	.7	.40607	.701	.209
.4875	.8	.40674	.706	.224
.4878	.9	.40840	.712	.241
1.4880	79.0	1.40806	11.717	9.256
.4883	.1	.40872	.723	.273
.4886	.2	.40938	.728	.289
.4888	.3	.41005	.734	.305
.4891	.4	.41072	.740	.322
1.4893	79.5	1.41138	11.745	9.337
.4896	.6	.41204	.751	.354
.4899	.7	.41270	.756	.370
.4901	.8	.41337	.762	.386
.4904	.9	.41404	.767	.402
1,4906	80.0	1.41471	11.773	9.418

## by Means of Refractometer when Readings are Made at Temperatures Other than 20 Degrees C.

### (International Temperature Correction Table, 1936)

	Percent Sucrose											
Temp. Degrees	0	5	10	15	20	25	30	40	50	60	70	
C.	Subtract from the percent sucrose											
10	0.50	0.54	0.58	0.61	0.64	0.66	0.68	.072	0.74	0.76	0.79	
11	.46	.49	.53	.55	.58	.60	.62	.65	.67	.69	.71	
12	.42	.45	.48	.50	.52	.54	.56	.58	.60	.61	.63	
13	.37	.40	.42	.44	.46	.48	.49	.51	.53	.54	.55	
14	.33	.35	.37	.39	.40	.41	.42	.44	.45	.46	.48	
15	.27	.29	.31	.33	.34	.34	.35	.37	.38	.39	.40	
16	.22	.24	.25	.26	.27	.28	.28	.30	.30	.31	.32	
17	.17	.18	.19	.20	.21	.21	.21	.22	.23	.23	.24	
18	.12	.13	.13	.14	.14	.14	.14	.15	.15	.16	.16	
19	.06	.06	.06	.07	.07	.07	.07	.08	.08	.08	.08	
					Add to	the Perce	nt Sucrose					
21	0.06	0.07	0.07	0.07	0.07	0.08	0.08	0.08	0.08	0.08	0.08	
22	.13	.13	.14	.14	.15	.15	.15	.15	.16	.16	.16	
23	.19	.20	.21	.22	.22	.23	.23	.23	.24	.24	.24	
24	.26	.27	.28	.29	.30	.30	.31	.31	.31	.32	.32	
25	.33	.35	.36	.37	.38	.38	.39	.40	40	.40	.40	
26	.40	.42	.43	.44	.45	.46	.47	.48	.48	.48	.48	
27	.48	.50	.52	.53	.54	.55	.55	.56	.56	.56	.56	
28	.56	.57	.60	.61	.62	.63	.63	.64	.64	.64	.64	
29	.64	.66	.68	.69	.71	.72	.72	.73	.73	.73	.73	
30	.72	.74	.77	.78	.79	.80	.80	.81	.81	.81	.81	